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THE INSECT PEST SURVEY
BULLETIN

A periodical review of entomological conditions throughout the United States
issued on the first of each month from March to December, inclusive.

Volume 8

July 1, 1928

Number 5

BUREAU OF ENTOMOLOGY
UNITED STATES
DEPARTMENT OF AGRICULTURE
AND
THE STATE ENTOMOLOGICAL
AGENCIES COOPERATING

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INSECT PEST SURVEY BULLETIN

Vol. 8

July 1, 1928

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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR JUNE, 1928

Although cutworms have not attracted an undue amount of attention throughout the greater part of the country, a rather serious outbreak developed late in the month on the overflowed land in Arkansas, occasioning a call for Federal aid. The pale western cutworm is also occurring in threatening numbers and doing very considerable damage in parts of North Dakota. Reports of lesser cutworm trouble were received from South Carolina, Mississippi, and Wisconsin.

A severe grasshopper outbreak appears to be developing in Kansas and Nebraska, but little grasshopper trouble is anticipated over the remainder of the country.

Brood A of the white grubs is appearing in destructive numbers in Iowa, Wisconsin, Kansas, and eastward to Indiana.

An unusually large number of wireworm reports have been received this month from New England and the Middle Atlantic States southward to South Carolina and westward to Wisconsin and Kansas. In Illinois they have already occasioned more damage than in many years. An unusual outbreak of the corn and cotton wireworm was reported about the middle of the month from Mississippi.

The Hessian-fly situation has developed a rather serious aspect in Ohio and Nebraska.

An unusual outbreak of the meadow plant bug developed early in the month in Iowa. In one case a 50-acre field of wheat was completely destroyed by this insect.

The wheat stem maggot is appearing in abnormally large numbers in Iowa, Nebraska, and Kansas. In Nebraska certain fields are suffering a loss of 30 per cent of the wheat heads.

The stalk borer is again being reported from Indiana westward to Iowa, Nebraska, and Kansas. It does not seem, however, to be so extensive or serious as last year.

Sod webworms are appearing in destructive numbers over the East Central and West Central States. These insects have not appeared in troublesome numbers during the past few years.

Corn billbugs are occurring in unusually large numbers and doing very considerable damage in parts of Ohio, Indiana, Illinois, Iowa, and Kansas.

A new species of Coleophora was discovered early in the month damaging grass in the central part of Indiana.

The lesser clover leaf weevil is very seriously affecting clover buds in eastern Illinois. Infestations in the first crop run from 30 to 60 per cent of the buds. This insect is occurring in about the usual numbers in Ohio.

Aphids continue to be subnormally abundant throughout the eastern fruit-growing sections of the United States.

The cool, wet weather which has prevailed in the East Central Middle Atlantic, and New England States is generally conceded to be adversely affecting the codling moth.

The pear midge appears to be becoming increasingly serious in the New England States and New York. In the latter State some orchards will suffer a 50 per cent loss this year.

Throughout the Middle Atlantic States westward to Ohio the oriental peach moth appears to be generally less prevalent than last year. Reports of very effective control by parasites have been received from Connecticut and New Jersey. The backward season, however, may have had something to do with this decrease in number.

Although appearing later than last year, the plum curculio is now doing about the average amount of damage in the New England, Middle Atlantic, and northern part of the South Atlantic States.

The walnut caterpillar is reported as more abundant on pecans in Texas than it has been for the past three years. Many trees are already defoliated.

During the month there have been several outbreaks of a small cistelid beetle, Hymenorus obscurus Say, attacking young fruits, blossoms, and leaves of citrus fruit in Florida. This insect usually feeds on lichens on the trunks of the trees.

The colorado potato beetle is being reported from the gulf region and Florida as unusually abundant. A similar report from Virginia might indicate that the year is to be one of unusual abundance of the insect.

The cabbage maggot is generally serious over the New England, Middle Atlantic, and Central States. In Iowa this pest has assumed economic importance only within the last few years and it seems to be increasing in destructiveness very rapidly.

About the middle of the month a rather severe outbreak of the diamond-back moth occurred on cabbage in South Carolina. This insect has also been reported from Mississippi.

The onion maggot is reported as doing considerable damage in Ohio, Indiana, Wisconsin, and Iowa.

The asparagus beetle was destructive in Ames, Muscatine, and Des Moines, Iowa this spring. This insect appears to be moving westward very rapidly.

The Mexican bean beetle was discovered at College Park, Md., this month and has made very considerable territorial expansion in North Carolina. In the original infested territory in Alabama the winter survival was lower than any season on record.

The lean leaf beetle has been unusually abundant in the two Carolinas this season, in some places completely defoliating the plants.

The outbreak of Chilo simplex Butler recently discovered in the Hawaiian Islands (Oahu) is now known to be infesting between 1,500 and 2,000 acres of rice. The infestation is so intense that from two rice stools 40 and 50 adult moths were reared.

The pine leaf scale is reported as seriously abundant in certain parts of Wisconsin and Nebraska.

A species of Neodiprion has completely defoliated pitch pines in many places in Connecticut. This is probably the same species that was reported late in June as defoliating pitch pines in Clinton County, New York, in which State it appeared for the first time last year.

A curculionid beetle Thylacites incanus L., has been discovered attacking various species of spruces in eastern Massachusetts nurseries. It has also been found on most of the pines in these nurseries excepting white pine. It is recorded as feeding on birch foliage in parts of Europe and, in Leng's catalogue, as having been collected in Missouri.

A severe outbreak of the eastern spruce beetle, which is believed to have started about 1922, has just been discovered in north-central Maine.

The cork oak midge, Plagiotrochus suberi Weld., was discovered for the first time in Los Angeles last year. This insect has been taken from San Jose, Santa Clara, San Francisco, and Pasadena, and

in every case on the European cork oak, upon which host it was evidently introduced from Europe.

Many complaints have been received from Mississippi of damage by the pecan bud moth to young pecan stock.

A serious outbreak of fleas has developed in Atlanta, Ga., which has attracted considerable attention of the Health Department of that city. A report of trouble from this insect has been received from Ocala, Fla.

The gnat, Hippelates sp. probably flavipes Loew, is proving extremely troublesome and annoying in the environs of New Braunfels, Tex.

The usual quota of reports on termites was received from the Central States.

Reports on the emergence of Brood II of the periodical cicada were received in large numbers throughout the early part of the month from Connecticut, New York, New Jersey, and Pennsylvania. The emergence in Virginia was completed early in the month and the insects in that State have practically disappeared. A very interesting collection was made at Yazoo City, Miss., on May 29 when inside a boll weevil cage there emerged a female periodical cicada. This belonged to the 13-year Brood XXVII. The only times that this brood has previously been recorded from any point in the United States were in 1902, when it was reported as appearing on May 20 at Suffolk, Franklin County, Miss., and thirteen years later, in 1915, when this brood was seen again at this place.

ERRATUM

In the first paragraph of the outstanding features of the last number of the Survey Bulletin (Vol. 8, No.4) the last sentence should read "Nova Scotia Fruit Growers Association is recommending early treatment for the red mites ***".

OUTSTANDING ENTOMOLOGICAL FEATURES IN CANADA FOR JUNE, 1928

The area at present known to be infested by the European corn borer in Ontario and Quebec covers approximately 95,650 square miles. It extends 575 miles from east to west and 385 miles from north to south. Infestations have been found as far west as St. Joseph Island, 15 miles east of Sault Ste. Marie, and as far east as Batiscan on the St. Lawrence River, 50 miles west of Quebec City. The insect has now reached practically the northern limit of the corn-growing area in Canada.

An outbreak of the roadside grasshopper, Camnula pellucida Scudder, has occurred in the Chilcotin ranges and surrounding country in British Columbia. Poisoned baits are being distributed at all infested points.

Wireworms have been by far the chief pest of field crops in southern Saskatchewan this spring. Recent heavy rains resulted in a partial recovery of the damaged crops in many fields.

The red-backed cutworm has infested about 50 per cent of the sugar-beet fields in southern Alberta, resulting in from 25 to 100 per cent loss. The infestation in wheat, sweet clover, and alfalfa is light, but some fields show as high a loss as 15 per cent.

Cutworms have been rather generally troublesome in gardens in southern Saskatchewan. This^{is} partly due to early hatching and the very dry conditions this spring. Several species were involved.

May beetles appeared in large numbers over extensive areas in southwestern Quebec during May and caused serious damage to the foliage of several species of deciduous trees. May beetle flights were also observed locally in New Brunswick during the latter part of May and early June.

Up to the middle of June, no adults or larvae of the Mexican bean beetle had been found in Ontario in localities where infestations were discovered last year.

Overwintering adults of grape leafhoppers are present in sufficiently large numbers in the Niagara peninsula, Ontario, to give rise, under favorable conditions, to local outbreaks.

Reports from Nova Scotia, New Brunswick, and British Columbia indicate that aphids are not abundant in these provinces this season.

A survey of the European beech bark louse situation in New Brunswick shows that there is a very heavy infestation of this species in Westmoreland County and one of less severity in Albert County.

Reports from British Columbia, Alberta, Saskatchewan, Ontario, Quebec, and New Brunswick, indicate that tent caterpillars of several species, principally the forest tent caterpillar and the eastern tent caterpillar, are unusually prevalent over widespread areas in the Dominion. A severe outbreak of the forest tent caterpillar developed over the whole eastern half of Alberta and northwestern Saskatchewan, seriously defoliating native poplars.

The spruce budworm is occurring in outbreak form in territory west and north of Sudbury, Ontario. During 1927 it spread extensively and the injury which will result from its depredations this season will probably be very severe.

A very extensive outbreak of the hemlock looper is occurring throughout the Muskoka Lake region in central Ontario. In the Thousand Islands area large numbers of trees have died and many thousands more are dying as a result of defoliation by this species during the past two years. Eggs of the looper have now hatched and the young caterpillars are feeding.

A very severe outbreak of the larch sawfly is reported from various sections of Ontario, even young stands of larch being affected.

Warble flies, Hypoderma bovis DeG., are widespread in southern Manitoba, affecting cattle, particularly young animals.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

- Florida H. W. Berger (June 22): An excessively large number of young lubber grasshoppers, Dictyophorus reticulatus Thunb., appeared during the latter part of May in some suburban allotments just west of Gainesville. The insects became so numerous that people, especially ladies, were annoyed by the insects crawling upon them. Following an unusually heavy, driving rain, comparatively few remained. No injury to plants was noted although the grasshoppers reported as crawling upon them in large numbers. The source of the infestation was not traced.
- Nebraska M. H. Swenk (May 15-June 15): During the first half of June reports of an abundance of grasshoppers, Melanoplus spp., in alfalfa fields have been received from western Nebraska, from Chase County east to Lincoln County.
- Kansas J. W. McColloch (June 20): Early reports indicate that a grasshopper outbreak is developing in the State. Between May 24 and June 7 reports were received from Bogue, Gelden, Oberlin, Edmond, and Larned.

CUTWORMS (Noctuidae)

- Massachusetts A. I. Bourne (June 25): Cutworms have been about as abundant as usual.
- New York Weekly News Letter, N. Y. State Coll. Agr. (June 11): Columbia County (A. B. Buchholz): Cutworms prevalent. Chautauqua County (G. H. Salisbury): Cutworms are very serious on cabbage and cauliflower in some lots.
- Arkansas W. A. Oldfield (June 20): Cutworms serious. Damage to all crops, principally corn on overflow land. Want Federal aid and advice (Telegram.)
- Mississippi R. W. Harned (June 25): A few complaints regarding cutworms have been received every day this spring. Only three species have been received during June. They are as follows: Lycophotia margaritosa saucia on corn at Holly Springs, Feltia annexa on cotton at Yazoo City, and Agrotis ypsilon on cotton at Yazoo City.
- New Mexico J. R. Douglass (June 11): Have received several reports of injury to corn and beans by cutworms throughout the Estancia Valley.
- Indiana J. J. Davis (June 26): Cutworms (Euxoa sp.) destroyed 3 or 4 acres of corn at Winamac according to a report received June 2.

Wisconsin

E. L. Chambers (June 15): Our pest reporters from Winnebago, Fond du Lac, Racine, Kenosha, Jefferson, Roch, Greene, Grant, and Monroe Counties have reported cutworms on corn and garden crops.

PALE WESTERN CUTWORM (Porosagrotis orthogonia Morr.)

North Dakota

C. N. Ainslie (June 22): This cutworm seems to be increasing in numbers this season and its injuries are more apparent than for the past two or three years. Fields of wheat have been destroyed near Mott, and serious damage to corn has been reported from different localities. For some reason this species has not multiplied during the past two or three years but the check seems to have been removed and the worms are becoming more numerous.

ARMY CUTWORM (Chorizagrotis auxiliaris Grote)

Kansas

J. W. McColloch (June 1): The moths of the army cutworm are reported abundant at Abbyville and Eureka.

VARIEGATED CUTWORM (Lycophotia margaritosa saucia Hbn.)

South Carolina

W. J. Reid, Jr. (May 15): The cutworms were found to have tunneled their way into the young heads of approximately 5 per cent of the plants in a 22-acre field of spring cabbage on the J. M. Harrison farm in the immediate vicinity of Charleston. The infested plants are rendered unfit for use as a result of the attack.

LINED CORN BORER (Hadena fractilinea Grote)

Wisconsin

E. L. Chambers (June 15): Timothy sod land followed by corn was reported badly attacked in spots by the lined stalk borer which seems to be worse than last year when many stalks along the fence rows of fields in that vicinity were reported damaged.

CORN EAR WORM (Heliothis obsoleta Fab.)

North Carolina

W. A. Thomas (June 14): A few specimens of this insect were observed on snap beans on this date. On a near-by tomato field a rather heavy infestation had developed and considerable damage is being done by the larvae boring into the nearly mature fruit. Most of the injured fruit has developed rot and is a total loss.

- Georgia Oliver I. Snapp (June 11): Infestation heavy on 300 acres of tomatoes in southern Georgia. Growers have experienced difficulty controlling the insect. Infestation also heavy at Fort Valley.
- Alabama L. W. Brannon (June 8): The first tomato fruit worm egg of the 1928 season was found in the field on young tomatoes at Birmingham, on May 21. This is a month later than the first egg was found last season. The moths are not so numerous in the fields as they were last season and damage to tomatoes is not expected to be so severe as in the average season. Some tomatoes on the plants were half grown when the first eggs were found. On May 29 eggs were found in a cornfield about 100 yards from the tomato patch. The corn in this patch was only about 1-foot high and eggs were on the leaves.
- Mississippi K. L. Cockerham (June 9): This insect continues its damage at Biloxi, attacking new corn and tomatoes. In addition to its injury to tomato fruits it is doing considerable damage tunneling vines and large stems.
- Mississippi R. W. Harned (June 25): Larvae of the corn ear worm Heliothis obsoleta Fab., were received on June 1 from Dixon, where they were reported as eating the seed pods of hairy vetch. Specimens of this species were also collected on corn at Holly Springs, on June 2, and on corn and tomato at Carthage on June 19.
- WHITE GRUBS (Phyllophaga spp.)
- Indiana J. J. Davis (June 26): Whitegrubs reported as damaging strawberry at Elkhart May 27 and at Mulberry June 5. Apparently the same insects were damaging garden crops at Mishawaka June 18. Asilid larvae were reported very abundant in soil in St. Joseph County June 23 where grubs were abundant last year.
- Illinois W. P. Flint (June 20): A number of reports of damage by white grubs have come in from the northern third of Illinois. Mr. Compton and Mr. Bigger recently made an examination of a number of grub-infested fields in northern and northwest-central Illinois. They report that the grubs are just starting to pupate and are working down somewhat in the soil. A very few newly formed, and some serious damage has occurred to early planted corn.
- Wisconsin E. L. Chambers (June 15): A general complaint has been received from our crop-pest reporters throughout the State to the effect that these grubs are threatening to be as serious as last year. In this region they pupate about midsummer, and so little damage is expected after that date.

Nebraska

M. H. Swenk (May 15-June 15): White grubs had resumed activities sufficiently to be the cause of complaints of injury to bluegrass lawns, privet, hedges, and strawberry plants by May 22 and 23.

Kansas

J. W. McColloch (June 8): A strawberry bed at Alma has been ruined by grubs.

Iowa

Carl J. Drake (June 4): White grubs, Brood A, are doing a considerable amount of damage to early-planted corn in eastern Iowa. Many fields were seriously injured or even entirely destroyed by this brood last year.

WIREWORMS (Elateridae)

Massachusetts

A. I. Bourne (June 25): Wireworms have been very abundant on a variety of crops, notably on corn and tobacco in the Connecticut Valley. They have been the cause of an unusual number of complaints from the tobacco growers, who have in many cases had to reset areas for the second time, and in some cases the insect has made setting for the third time necessary. Apparently this is associated with the cold and persistent wet weather encountered this season. From our personal observation the lower fields and lower sections of other fields have been the worst infested. This, I believe, followed out the observations you have made personally on these insects.

New York

Weekly News Letter N. Y. St. Coll. Agr. June 4.
Onondaga County (W. E. Fields): Wireworms are busy in some corn and potato fields.

G. H. Griswold (June 28): Wireworms are attacking gladioli at Frankfort. They bore through stalk below ground and eat up and down tender shoots. Species undetermined.

Pennsylvania

C. A. Thomas (June 12): The larvae of Pheletes agonus Say are now at their height and are doing considerable damage to cabbage and small beets in Philadelphia and Bucks Counties. Adults first appeared early in May.

Indiana

J. J. Davis (June 26): Wireworms were destructive to corn in low ground at Covington May 26. This field was in corn in 1925, in oats in 1926, in wheat in 1927, and in corn in 1928. They also damaged corn at Salem June 20.

Illinois

W. P. Flint (June 20): Wireworms have caused more damage than has been the case for a number of years. Reports of severe injury to corn have come in from all parts of the State with the exception of the extreme southern and northeastern counties. Damage has been reported on both high and low ground and to corn on several different rotations. Many cases have

been reported where corn was seriously injured on ground which was sown to wheat last fall and where the winter wheat was killed.

Wisconsin

E. L. Chambers (June 15): In lowlands wireworms have been doing unusually serious damage during the past few weeks.

Kansas

J. W. McColloch (June 20): Injury to corn by wireworms was reported from Paola on May 23, Mankato on May 28, and Liberty June 6.

North Carolina

J. N. Tenhet (June 15): Adults of Monocrepidius vespertinus Fab., the tobacco wireworm are just beginning to emerge. The first individual was collected on a tanglefoot screen June 12. (June 23): Damage to tobacco by wireworms has been negligible this spring in the Chadbourn territory. (June 20): A small elaterid, M. bellus Say, is being collected in considerable numbers from the vicinity of strawberry fields at Chabbourn.

C E R E A L A N D F O R A G E - C R O P I N S E C T S

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

Ohio

T. H. Parks (June 24): Examinations made yesterday south of Columbus in the Scioto Valley show the Hessian fly to be causing some green straws to lodge and the infestation is much heavier than expected. This is true even though practically no wheat was sown before the safe sowing date last fall. The insect infested only about 1 per cent of the straws last year at harvest time in this group of counties but this year will cause some economic loss. The weather has been very rainy during June with heavy showers almost every day. Wheat is late in maturing and very thick on the ground as a result of winter killing. (June 22): There are so few fields of wheat that escaped the winter freezing in western Ohio that those left are for the most part the earlier sown ones. Fears of Hessian fly damage were held. This does not seem to be the cause upon inspection though the annual wheat-insect survey will not start until July. Examinations made at Wooster, Ohio, show more Hessian fly present than last year with some of the straws lodged. We have had an abundance of rain during June.

Nebraska

M. H. Swenk (May 15-June 15): As the attack of the second spring (or early summer) brood of the Hessian fly has developed in the wheat crop, during June, it has become apparent that several other Nebraska counties, in addition to Saunders County have a general, but usually not heavy, infestation with this insect. The most serious report of injury came in middle June from Merrick County where the larger part of a 40-acre wheat field has become straw fallen because of the attack of

this pest. Given a summer with plenty of rainfall and a heavy growth of volunteer wheat and the Hessian fly can easily build up a menacing abundance in this State by the time of the appearance of the main fall brood of 1928.

CHINCH BUG (Blissus leucopterus Say)

Kansas J. W. McColloch (June 20): There has been no damage by the chinch bug in the State to our knowledge. Abundant rainfall during the past few weeks has destroyed the few bugs present in the fields.

Mississippi R. W. Harned (June 25): Specimens of the chinch bug were received on June 1 from Holly Springs. Only two infested plants were found in a 10-acre corn-field.

MEADOW PLANT BUG (Miris dolabratus L.)

Iowa Carl J. Drake (June 4): The meadow plant bug Miris dolabratus, is doing serious damage in a few wheat fields in the southeastern portion of the State. One farmer near Muscatine reports that the insect is migrating from the adjoining fields and fence rows into a large wheat field, 50 acres, and destroying all the wheat in its path. This is the first report of serious injury to wheat in the State.

WHEAT STEM MAGGOT (Meromyza americana Fitch)

Iowa C. N. Ainslie (June 25): White heads are appearing in many wheat fields in this vicinity (Sioux City) and farmers generally attribute these to Hessian fly attack. It has been so reported in the local press. The adults of Meromyza are numerous everywhere and they are always taken in every sweeping of grasses and grains. The loss from their injury to wheat will be nominal - a very small percentage.

Nebraska M. H. Swenk (May 15-June 15): During the period from June 10 to June 15 a number of reports of the wheat stem maggot were received from different southeastern Nebraska counties, including Butler, Fillmore, Nuckolls, Kearney and Merrick Counties. In some cases as high as 30 per cent of the heads in the fields have been destroyed by this pest. This season will rank along with 1912, 1916, 1921, and 1927, as a year of serious losses.

Kansas J. W. McColloch (June 1): The wheat stem maggot is said to have injured the wheat crop in Harper County about 2 per cent.

GREEN BUG (Toxoptera graminum Rond.)

Nebraska M. H. Swenk (May 15-June 15): An infestation by the spring grain aphid or green bug in the oat fields of southeastern

Holt County was discovered early in June; the first case of this sort since 1922. It has destroyed some of the oats where it was working, but the trouble was neither extensive or severe.

WHEAT-SHEATH GALL JOINTWORM (Harmolita vaginicola Doane)

Ohio

T. H. Barks (June 22): Inspections made last week in Pickaway County showed numerous straws elbowed near the joint and stunted by the wheat sheath worm. This has been a pest in other years in eastern Ohio but I have never seen economic damage this far west in the State. Wheat was quite late in getting started this spring and many fields were sowed to oats. More information will be procured by the annual wheat insect survey.

A MIRID (Thyrillus pacificus Uhl.)

Washington

R. L. Webster (June 2): County extension agents in Adams and Franklin counties report injury to wheat, the insects moving to that crop from wild grasses.

CORN

STALK BORER (Papaipema nebris nitela Guen.)

Indiana

J. J. Davis (June 26): The stalk borer was reported as damaging corn at Stewartsville, May 30; Delphi, June 17; Hope, June 18; and Franklin, June 22. Tomatoes and sweet corn were damaged at LaFayette early in June. The same borer attacked blackberryshoots at Greenfield, June 16. Tomatoes were seriously damaged at Brownstown, June 23.

Iowa

Carl J. Drake (June 4): The stalk borer is very abundant in the State and at the present time is in the fourth and fifth instars. Specimens have been taken during the past year in every county in the State except two. The principal injury is done to oats, timothy, wheat, corn, and garden plants.

Nebraska

M. H. Swank (May 15-June 15): The first report of attack on corn by the stalk borer for the season was received on June 15.

Kansas

J. W. McColloch (June 20): The borer has caused some loss to corn again this year. Reports have been received as follows: Olsburg, May 23; Washington, June 1; Tescott, June 8; Lincoln, June 11; Burlington, June 13; Perry, June 14; and Manhattan, June 18.

EUROPEAN CORN BORER (Pyrausta nubilalis Hbn.)

Ohio

T. H. Parks (June 25): Several hundred corn borer larvae

collected in northern Ohio in March have been confined in cages at Columbus. These are now pupating, about 40 per cent having changed to pupae to date. No moths have yet emerged and there is no indication that the insect will be two-brooded in this latitude. Borers have been kept under outdoor conditions, receiving rainfall and moisture as though exposed on surface of open field.

A CORN STALK BORER (Hadena sp.)

Ohio

T. H. Parks (June 22): The Hadena stalk borer has been seriously damaging young corn in fields planted on timothy sod (spring plowed) in several eastern Ohio counties. The borers tunnel down the stalk and destroy it. Some fields have had to be replanted. One farmer in Carroll County plowed part of his timothy sod in the fall, a second part in late winter, and the remainder in late spring. The only damage that occurred was on the part plowed in the late spring. Fall and winter plowing seemed to control. Damage has been reported from Carroll, Tuscarawas, Jefferson, Harrison, and Portage Counties. These are all in eastern Ohio.

HOP VINE BORER (Gortyna immanis Guen.)

Massachusetts

A. I. Bourne (June 25): In early June Prof. Whitcomb of the substation at Waltham reported finding Lepidopterous larvae injuring corn in Middlesex County. He reported that these larvae were severely damaging about 30 per cent of the corn on one field. These larvae were identified for us at the National Museum as species of Gortyna, probably G. immanis Guen.

SOD WEBWORMS (Crambus spp.)

Ohio

T. H. Barks (June): Specimens of sod webworms were sent to this office with statement that they were destroying young corn plants and causing replanting.

Indiana

J. J. Davis (June 26): Webworms damaged corn in addition to the reports sent in last month from the following counties from May 28 to June 1: Grant, May 27; Jasper May 28; Miami, May 29; Bartholomew and Fountain, May 31; Morgan, June 1; St. Joseph, May 31. In all cases except St. Joseph County the insects were injuring corn. The report from St. Joseph County referred to them as feeding on mint. June 21 received full-grown sod webworms which were reported damaging corn in Starks County.

Illinois

W. P. Flint (June 20): Sod webworms have been much more abundant than usual in central Illinois this season. A very considerable amount of damage from these insects has occurred.

Wisconsin

E. L. Chambers (June 15): Several different specimens of corn plants infested with one of the sod webworms have been received during the past week.

Iowa

Carl J. Drake (June 4): Two species of sod webworms are very abundant in the southern portion of Iowa. Reports of serious injury to young corn have been received from Wayne, Page, Madison, and Mahaska Counties.

Nebraska

M. H. Swenk (May 15-June 15): Late in May a case of injury to a Fillmore County cornfield by the leather-colored sod webworm (Crambus trisectus) was reported to this office.

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana

W. E. Hinds (June 20): The first generation of borers bred this spring is now becoming adult in the earliest planted corn especially, and eggs are beginning to be deposited for the second generation. The borer infestation appears to be unusually light throughout the cane belt of Louisiana.

Texas

J. N. Rovey (June 19): Most of the cornfields are now infested with the sugarcane borer in Liberty County.

CORN ROOT APHID (Anuraphis maidi-radicis Forbes)

Illinois

J. H. Bigger (June 15): Increased abundance of the corn root aphids this year following a wet season for two years during which weeds grew rank in the fields. Corn was seeded very early in this section in 1928.

CORN BILLBUGS (Sphenophorus spp.)

Ohio

T. H. Parks (June 22): The insect S. zeae damaged corn in a belt through the central and western counties. The first planting was a 25 to 60 per cent loss in most fields infested. Damage always followed timothy plowed for corn in the spring. Not all fields so handled were damaged. Soil type or drainage did not influence damage. The second planting was not seriously damaged where the first planting was not cultivated out. Inspections made by C. R. Neiswander and the writer June 14 showed that most of the billbugs had then left the fields and damage was over.

Indiana

J. J. Davis (June 26): Reports of injury to corn by billbugs Sphenophorus parvulus Gyll., have been received from the following counties: Benton, May 28; Grant, May 27; Boone, May 26; Clinton, May 28; Parks, May 28. We have continued to receive reports of injury to corn by billbugs S. zeae, the last report being received June 4. During this period the following counties reported trouble: Grant, May 27; Boone, May 26; Blackford, May 4. Billbugs, Sphenophorus sp., (unidentified)

have injured corn. Reports received from Fountain County, May 31; Carroll County, June 2, and Madison County, June 4.

Harry F. Dietz (May 31): Reports of severe damage to corn by billbugs have been received from Rush, Howard, and DeKalb Counties, these reports all coming in since the 20th of the month.

Illinois

W. P. Flint (June 20): Damage by billbugs has been reported from many of the counties in the northern half of the State. In all cases damage was from some of the smaller species of billbugs, including the timothy billbug, and occurred to corn following timothy or blue-grass sod. Most of the reports of injury came in during the latter part of May and damage has practically ceased at this time. In a number of cases it was necessary to replant infested fields of corn.

Iowa

Carl J. Drake (June 4): Corn billbugs seem to be fairly common throughout southern Iowa. Reports of serious injury have been received from Decatur, Guthrie, Union, Monroe, and Clarke Counties.

Kansas

J. W. McColloch (June 20): Injury to corn was reported from Potwin on May 23 and from Ogden on June 5.

CORN FLEA BEETLE (Chaetocnema pulicaria Melsh.)

Illinois

J. H. Bigger (May 26): Severe damage was done by adults of corn flea beetle during the week of May 31, in the western part of State. The attack was followed by cool weather which intensified the damage.

SUGARCANE BEETLE (Euethola rugicens Lec.)

Mississippi

H. W. Harned (June 25): One rather serious complaint in regard to the rough-headed corn stalk beetle or sugarcane beetle Euethola rugiceps has been received recently. This complaint came from Hernando on June 8. The correspondent reported that the corn in one field had been completely destroyed by the beetles.

FALSE WIREWORMS (Eleodes sp.)

New Mexico

J. R. Douglass (June 11): Have received several reports of injury to corn and beans by the false wireworms throughout the Estancia Valley. Observations show that they are more abundant than cutworms.

SAND WIREWORM (Horistonotus uhleri Horn.)

Mississippi

R. W. Harned (June 25): On June 13 a correspondent at Neshoba sent to this office some corn plants, with the report that

the corn seemed to be dying in spots throughout one of his fields. These plants contained specimens of the corn and cotton wireworm Horistonotus uhleri. On June 14 specimens of this species were received from Poplarville with the report that the insects had destroyed three acres of corn.

CRANE FLIES (Tipulidae)

Indiana

J. J. Davis (June 26): Tipulid larvae were abundant and reported cutting off corn at Anderson May 26, and at Delphi June 2.

GRASS

A CASE BEARER (Coleophora sp.)

Indiana

J. J. Davis (June 26): A peculiar case-bearing lepidopterous larva was reported from Lapel, June 6, feeding on grass. The observer reported that its presence appeared as oats scattered in the vegetation. The adult has not yet been reared. (Mr. A. Busck reports that this is a new species of Coleophora.)

ALFALFA

A MARCH FLY (Bibio albipennis Loew.)

Nebraska

M. H. Swenk (May 15-June 15): During the period from May 15 to 25, quite a number of inquiries were made as to the meaning of a great abundance of March flies (Bibio albipennis) that were present in the alfalfa fields of northern and central Nebraska, where they had apparently developed in large numbers on the old decaying roots of winter-killed alfalfa plants.

ALFALFA WEEVIL (Phytonomus posticus Gyll.)

California

Monthly News Letter, Los Angeles Co. Hort. Comm., Vol. 10, No. 6, June 15, 1928. There is always a possibility of the alfalfa weevil being introduced on the potato sacks from Nevada where this pest is known to be present. This is a serious pest of alfalfa which does a large amount of damage in States where it is present but is not present in southern California.

PEA APHID (Illinoia pisi Kalt.)

Indiana

J. J. Davis (June 26): On May 28, ladybird beetle larvae were reported very abundant in an alfalfa field at Rochester which had been damaged by the pea aphid.

Wisconsin

J. E. Dudley, Jr. (June 23): The weather conditions were generally cool and rainy during June. Over 2.5 inches of rain have fallen in the last ten days. The natural enemies observed

were coccinellids, of first importance, syrphids beginning to become conspicuous and chrysopids beginning to appear.

Alfalfa swept on the 15th showed 384.00 per 7,500 sq. ft. No. sweeping possible in alfalfa since then on account of rain and wet foliage. Peas swept on 21st showed 9,400 per 1,900 sq. ft. On alfalfa just in blossom there is a decided scarcity of alate adults and immature stages showing wings. In pears just coming into bloom there is a large proportion of the winged forms.

Kansas

J. W. McColloch (May 28): This aphid is reported killing out a field of spring-sown alfalfa at Topeka.

CLOVER

CLOVER LEAF WEEVIL (*Hypera punctata* Fab.)

Indiana

J. J. Davis (June 25): The clover leaf weevil is common on alsike clover at Waveland May 28.

LESSER CLOVER LEAF WEEVIL (*Phytonomus nigrirostris* Fab.)

Ohio

T. H. Parks (June 22): The clover bud weevils are present as usual but the frequent rains of this month have stimulated growth of the clover, resulting in little damage from this insect. They are now from one-half to full grown larvae at Columbus.

Illinois

W. P. Flint (June 20): Examinations made by J. H. Bigger in western Illinois showed that 64 per cent of the clover buds in first-crop clover were infested by this weevil, and 37.6 per cent of the heads had been destroyed completely. These figures are based on examinations made in a number of fields in several different counties in western Illinois.

Examinations made on the University Farm at Urbana show an average of 84 per cent of the heads infested on June 8. At this time many of the weevil larvae were still quite small, and it is probable that at least as high as one per cent of the heads would be destroyed in eastern Illinois as is the case in the western part of the State.

FRUIT INSECTS

APPLE

APHIDIDAE

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, and 25. Aphids are generally extremely scarce throughout the State reports having been

received from Columbia, Chautauqua, Onondaga, Clinton, Greene Orange, Dutchess, Genesee, Ontario, Monroe and Niagara Counties.

APPLE APHID (Aphis pomi DeG.)

Connecticut

M. P. Zappe (June 25): Aphids are very scarce and hard to find. A few eggs present in spring but now aphids are practically gone. Very much fewer compared with average year.

Indiana

Harry F. Dietz (May 31): In the Hancock County orchards green apple aphids are beginning to appear. Here the nine-spotted ladybird (Coccinella novemnotata Hbst.) and the spotted ladybird (Ceratomegilla fuscilabris Muls.), as well as the larva of Chrysopa were found.

APPLE GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

New York

Weekly News Letter N. Y. St. Coll. Agr. June 4. Clinton County (A. B. Burrell): Grain aphids seem to be multiplying rather rapidly and are numerous on the terminals in some orchards.

ROSY APPLE APHID (Anuraphis roseus Baker)

Connecticut

M. P. Zappe (June 25): Practically no aphids on apple trees.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4 and 25. During the early part of the month the rosy apple aphids were found quite plentifully in Orange, Greene, Monroe, and Niagara Counties. The remaining counties of the fruit belt reporting them as still very scarce; by the third week in the month, however, no really serious developments had taken place.

Indiana

Harry F. Dietz (May 31): Examination of orchards in Brown County show the presence of rosy apple aphids in small numbers. The adults of several species of ladybird beetles were found in all clusters of the plant lice. The two species that were most common were Coccinella novemnotata Hbst. and Adalia bipunctata L.

Bennet A. Porter (June 20): Infestations have varied from light to moderate, and are very spotted. Winged migrants have been appearing since early June.

WOOLLY APPLE APHID (Eriosoma lanigerum Hausm.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4 and 11: Woolly aphids were recorded in small numbers during the early part of the month in Chautauqua, Orange, and Ontario Counties.

CODLING MOTH (Carpocapsa pomonella L.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11, and 25: During the first week in the month the earliest emergence of the codling moth adults were observed in Orange, Greene, and Columbia Counties. During this week no emergence was observed in the Lake counties. By the third week in the month eggs were found in Ulster County and general emergence was observed throughout the fruit belt.

Massachusetts

A. I. Bourne (June 25): Our first codling moth emerged in the breeding cages on May 25. In the orchard they were first observed on June 5, in the eastern part of the State, by Prof. Whitcomb, and a few days earlier at Amherst.

Ohio

T. H. Parks (June 13): Emergence is now at its height at Columbus, and about 50 per cent over. Has been in progress since May 18 with most individuals emerging from caged material since June 5. Spraying is being done at Columbus this week. (June 22): The emergence of adult codling moths from a field cage located at Ironton in southern Ohio as reported by L. A. Stearns commenced May 9, and was over except for a few stragglers May 24. The emergence from our screen cage out of doors at Columbus commenced May 23 and moths are still emerging June 22; 80 per cent of the moths emerged after June 4 with the highest emergence June 22. Nights were too cool for egg laying until June 10 since which they have been favorable.

Emergence at Oak Harbor (near Toledo) commenced June 8 with the maximum June 13 and emergence still going on. Spraying for central Ohio was advised the week of June 11-16 and for Lake Erie Counties June 15-25.

Indiana

Bennet A. Porter (June 20): Eggs started hatching in the field about June 1, but did not start hatching in numbers until about June 10. The cool, wet weather which has prevailed since petal fall has been unfavorable to the codling moth. Besides being unusually late, the infestations are unusually light thus far.

Nebraska

M. H. Swenk (May 15-June 15): The spring brood of the codling moth (Carpocapsa pomonella) began its emergence at Lincoln, and elsewhere in southeastern Nebraska, on May 23, and there were periods of heavy emergence from May 25 to 30, and again from June 5 to 15. The first eggs of the first brood of 1928 were taken on June 15.

United States

Monthly Letter of the Bureau of Entomology No. 169, May 1928. Of the 8,000 *Ascogaster* parasites of the codling moth collected at Yakima in 1927, over 4,000 have been distributed to other States, two lots each having been sent to Colorado and California, and one each to Oregon, New Mexico, and Arizona.

FRUIT TREE LEAF ROLLER (Archips argyrospila Walker)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11, and 25. Leaf rollers were generally numerous during the first week in the month throughout the entire fruit-growing sections of the State, and by the middle of the month were doing considerable damage in Ulster and Chautauqua Counties; by the third week in the month they were pupating in considerable numbers, but no second-generation adults had emerged prior to June 25.

CASE BEARERS (Coleophora spp.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agr. June 4, 11, and 25: Although case bearers were reported quite generally throughout the month, but little commercial damage was done with the exception of a few poorly-cared-for orchards.

APPLE AND THORN SKELETONIZER (Hemerophila pariana Clerck)

New York

Weekly News Letter, N. Y. St. Coll. Agr. June 4. Dutchess County (Ray Bender): A few skeletonizers have been seen. Greene County (A. S. Mills): Skeletonizer larvae were on many leaves in some orchards on May 28. (June 25): Monroe County (R. C. Coombs): Skeletonizers are completing the work started by the tent caterpillars in neglected orchards in the south of the county.

EYE-SPOTTED BUDMOTH (Spilonota ocellara Schiff.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agr. June 4, 11, and 25. Bud moths were reported from practically every county in the fruit belt and were generally estimated as being more numerous than usual. By the middle of the month they were pupating and by the end of the month adults were emerging in central New York.

GREEN FRUIT WORM (Graptolitha antennata Walk.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. State Coll. Agr. June 4, 11, and 25. The green fruit worm was prevalent throughout the month in Chautauqua, Ulster, and Columbia Counties.

EASTERN TENT CATERPILLAR (Malacosoma americana Fab.)

Maine

H. B. Pierson (June 1): General throughout State. Infestation heavy as compared with average year.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11, and 25: The eastern

tent caterpillars, though abundant in Dutchess and Chautauqua Counties, were not recorded as doing any commercial damage.

Pennsylvania

T. L. Guyton (June 21): The species is common in Wyoming and Lacawanna Counties.

Nebraska

M. H. Swenk (May 15-June 15): In an orchard in Dawson County during the first week in June the apple tree tent caterpillars stripped a number of the trees of their leaves.

FALL CANKER WORM (Alsophila pometaria Harr.)

Connecticut

B. H. Walden (June 22): Between 50 and 100 acres of woodland, largely black oak sprouts, nearly stripped. Also locally more abundant than in average season throughout the southern part of the State.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. State Coll. Agr. June 11 and 25: The latter half of the month cankerworms were recorded from Ulster, Chautauqua, and Monroe Counties, mostly in neglected orchards.

WHITE-MARKED TUSSOCK MOTH (Hemerocampa leucostigma S. & A.)

New York

Weekly News Letter, N. Y. St. Coll. Agr. June 4: Chautauqua County (G. H. Salisbury): Tussock moth larvae are small and few in numbers.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Indiana

Bennet A. Porter (June 20): The first crawlers were observed June 15, abnormally late. On account of the abnormally high winter mortality very few first brood crawlers are to be found.

Wisconsin

E. L. Chambers (June 15): While the San Jose scale has become established in only a few towns it is spreading slowly each year where no effort has been put forth to control it. Seems worse compared with last month.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Massachusetts

A. I. Bourne (June 25): The oyster-shell scale began hatching June 13-14. On the latter date they were appearing in large numbers. This is somewhat later than the corresponding date last year.

APPLE REDBUG (Lygidea mendax Reut.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11 and 25: The apple redbug

has been reported throughout the month as doing more or less serious damage in Onondaga, Chautauqua, Genesee, Dutchess, and Columbia Counties.

ROUND-HEADED APPLE TREE BORER (Saperda candida Fab.)

New York

Weekly News Letter, N. Y. St. Coll. Agr. June 11. Orange County (Sidney Jones): Round-headed apple tree borers found on June 8.

A POWDER POST BEETLE (Lyctus sp.)

Wisconsin

E. L. Chambers (June 15): Specimens of Lyctus sp. infesting young apple trees recently purchased from an out-of-state nursery were sent in by a farmer in Polk County.

IMBRICATED SNOUT BEETLE (Epicaerus imbricatus Say)

Nebraska

M. H. Swenk (May 15-June 15): On June 1 an abundance of the imbricated snout beetle was found in a young apple orchard in Lancaster County, south of Lincoln, where they were attacking the foliage of the trees.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Connecticut

Philip Garman (June 25): Reported as being abundant in the northern part of the State, in New Haven County.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agr. June 4, 11, and 25. The European red mite was generally scarce throughout the State during June.

PEAR

ROSE LEAF BEETLE (Nodonota puncticollis Say)

New York

Weekly News Letter, N. Y. St. Coll. Agr. June 25: Rose leaf beetles are doing some feeding on Bartlett pears.

PEAR THRIPS (Taeniothrips inconsequens Uzel.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, and 11: Pear thrips are reported from Clyde and Chautauqua Counties.

PEAR PSYLLA (Psyllia pyricola Foerst.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11, and 25: By the first

week in the month practically all psylla eggs had hatched. The insect is generally distributed over the southeastern fruit section and appears to be about normally abundant.

PEAR LEAF BLISTER MITE (Eriophyes pyri Pgst.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4 and 11: Reports of damage by this insect were received during the first half of the month from Clyde and Chautauqua Counties.

PEAR MIDGE (Contarinia pyrivora Riley)

Massachusetts

A. I. Bourne (June 25): Prof. Whitcomb reports a record of the pear midge from Norfolk County. Just how serious and widespread this damage is he has not yet been able to determine but he intends to procure this information later.

Connecticut

W. E. Britton (June 25): The fruit of pears from Wallingford and New Wilford has been submitted with these maggots.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4 and 11: In the southeastern fruit counties, pear midge, is becoming increasingly serious. In some orchards over 50 per cent of the pears were destroyed by this insect.

QUINCE

QUINCE CURCULIO (Conotrachelus crataegi Wash)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 11 and 25: This insect was first observed in Orange and Ulster Counties during the first week and in Ontario County during the third week in June.

PEACH

PEACH BORER (Aegeria exitiosa Say)

New York

Weekly News Letter N. Y. St. Coll. Agr. June 11: The peach borer has been reported as injurious in Ulster County.

ORIENTAL FRUIT MOTH (Laspeyresia molesta Busck)

Connecticut

Philip Garman (June 25): The insect is showing up on peach more in the north-central part of the State. If anything it is less abundant than last year. It is being parasitized by Trichogramma minutum Riley.

New Jersey

A. Peterson (June): In the vicinity of Moorestown the growing twigs in peach orchards, particularly on young trees, were heavily infested with oriental peach moth larvae the first two weeks in June. Fortunately 50 to 60 per cent or more have been parasitized by Macrocentrus ancyliivora Roh. This parasite is proving to be a very efficient agent in reducing the infestations in the southern half of the State. It is probable that the second-brood larvae will be parasitized from 75 to 95 per cent as in previous seasons.

Georgia

O. I. Snapp (June 16): A rather heavy infestation was found today in a home orchard in the town of Greenville. The infestation in the peach belt as a whole is much lighter than it was last year.

Ohio

E. W. Mendenhall (June 12): A slight outbreak of the oriental peach moth in Clark County has occurred. On account of the backward season the moth is later in making its appearance.

OBLIQUE-BANDED LEAF ROLLER (Cacoecia rosaceana Harr.)

Indiana

J. J. Davis (June 26): The oblique-banded leaf roller was reported as eating in the fruit of peach at Mitchell June 22. This is an uncommon report.

PEACH AND PLUM SLUG (Eriocampoides amygdalina Rohwer)

Mississippi

R. W. Harned (June 25): Larvae tentatively identified by Mr. J. M. Langston as the peach and plum slug Caliroa amygdalina were collected on peach trees at Belzoni recently. They had caused only slight injury.

GREEN PEACH APHID (Myzus persicae Sulz.)

Ohio

E. W. Mendenhall (June 8): The green peach aphids are quite abundant in the vicinity of Columbus and are doing some damage.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Indiana

J. J. Davis (June 26): The shot-hole borer was apparently responsible for the death of apple and peach shoots by boring in at the base of the foliage and fruit spurs at Washington.

SAY'S BLISTER BEETLE (Pomphopoea sayi Lec.)

Connecticut

W. E. Britton (June 25): This insect has been reported as devouring the foliage of peach at Canaan.

COTTONY PEACH SCALE (Pulvinaria amygdali Ckll.)

New York

Weekly News Letter, N. Y. St. Coll. Agr. June 11: The cottony peach scale has developed egg masses in Niagara County.

CHERRY

CHERRY FRUIT FLY (Rhagoletis cingulata Loew)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4, 11, and 25: Adult flies began to emerge the first week in June in the southern part of the State though general emergence was not observed over this region until about the middle of the month, the peak having been reached in Ulster County on the 20th. No serious damage has yet been reported.

DARK CHERRY FRUIT FLY (Rhagoletis fausta O.S.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agr. June 11 and 25: The first flies of this species were observed in Ulster County June 6 and by the end of the month they were present in large numbers throughout the State.

Michigan

R. H. Pettit (June 26): This is to notify you that this morning our field man, Mr. G. S. Tolles, reported the emergence of large numbers of the cherry fruit fly, R. fausta, at the town of Gobles in Allegan County. The cherries in the southern part of the State are beginning to color up now, but apparently it will be about 7 to 10 days before picking begins with the Early Richmonds. The canning associations and the county agents in the districts controlled by this cage have been notified by wire, in order that the final spray for the pest may be put on in time to catch the adults before they lay their eggs.

BLACK CHERRY APHID (Myzus cerasi Fab.)

New York

Weekly News Letter N. Y. St. Coll. Agr. June 25: The cherry aphids are multiplying on both sweet and sour cherries in Ulster County.

Ohio

E. W. Mendenhall (June 8): The black cherry louse is quite bad in cherry leaves in the vicinity of Columbus. They are found on the under side of the leaves.

PLUM

RUSTY PLUM APHID (Hysteroneura setariae Thos.)

Nebraska

M. H. Swenk (May 15-June 15): The period from May 25 to June

15 has been attended with a great abundance of aphids of many kinds. The one that has been most complained of has been the rusty plum aphid, H. setariae, on plum and peach trees, especially the former. The area of greatest trouble seems to be in Hall, Adams, Webster, and Kearney Counties, though reports have been received from much of the South Platte area in Nebraska.

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Connecticut

Philip Garman (June 25): The plum curculio was late in getting started this year but is fully as destructive to apple as in an ordinary season in New Haven County.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr., June 4, 11, and 25: The first adults began appearing late in May in the southeastern part of the State and by the middle of June serious injury was reported from all of the southeastern counties, and by the end of the month reports of similar damage were being received from central New York.

North Carolina

R. W. Leiby (June 23): The first-brood adults began emerging June 15 according to J. A. Harris. The peak of emergence will probably be reached about June 25. About 15 per cent of the larvae have been destroyed by Triaspis curculionis.

Georgia

O. I. Snapp (June 18): The first adult of the new generation emerged from the soil today. This is a very late first emergence date and only one generation is anticipated. Last year the first adult emerged on May 24.

RASPBERRY

RASPBERRY FRUIT WORM (Byturus unicolor Say)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 11: The American raspberry beetle is causing damage in raspberries and dewberries in Columbia County and is present in large numbers in most berry plantings in Wayne County.

RASPBERRY SAWFLY (Monophadnoides rubi Harris)

Indiana

J. J. Davis (June 26): The raspberry sawfly (det. from foliage injury) was abundant at North Manchester, June 9.

GRAPE

GRAPE TOMATO GALL (Lasioptera vitis O. S.)

New York Weekly News Letter N. Y. St. Coll. Agr. June 25: Gall insects which were found on grapes two weeks ago in Orange County have been identified as the grape tomato gall.

GRAPE BERRY MOTH (Polychrosis viteana Clem.)

New York Weekly News Letter N. Y. St. Coll. Agr., June 25: A grape berry moth was caught in Chautauqua County recently.

ROSE CHAFER (Macrodactylus subspinosus Fab.)

New Jersey D. W. Webb (June 10): This insect was numerous and had completely eaten the white blooms of roses, peonies, and grapes at Pennington.

EIGHT-SPOTTED FORESTER (Alypia octomaculata Fab.)

Kansas J. W. McColloch (May 28): Larvae of this species are reported as injuring grape foliage at Brookville.

GRAPE PLUME MOTH (Oxyptilus periscelidactylus Fitch)

New York C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr., June 4 and 11: Larvae of this insect are doing considerable injury to the foliage of grape in Ulster and Orange Counties.

GRAPE LEAFHOPPER (Erythroneura comes Say)

Nebraska M. H. Swenk (May 15-June 15): The grape leafhopper was reported injuring woodbine vines and grapes from various localities beginning May 25 and continuing to June 10.

GRAPE ROOT WORM (Eidia viticida Walsh)

New York Weekly News Letter N. Y. St. Coll. Agr. June 25: The grape root worm is mostly in the grub stage though some have begun to pupate (Chautauqua County).

Kansas J. W. McColloch (June 12): Beetles of this species are injuring the foliage of grapes at Wathena.

APPLE TWIG BORER (Amphicerus bicaudatus Say)

Nebraska M. H. Swenk (May 15-June 15): Another report of an abundance of the grape cane borer Schistoceros hamatus, in grapevines was received from Saline County during the third week in May.

CURRAINT AND GOOSEBERRY

IMPORTED CURRAINT WORM (Pteronidea ribesi Scop.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4 and 11: The imported currant worm is present in most currant patches in Chautauqua County, and an adult of this species was found on currants at Fostertown June 8.

Indiana

H. F. Dietz (May 31): We have had reports of currant worms doing serious damage to currants and gooseberries in the vicinity of Indianapolis on May 23.

CURRAINT APHID (Myzus ribis L.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agr. June 4; The currant aphid is present in variable numbers in Ulster County and present in most currant patches in Chautauqua County.

BLUEBERRY

GOOSEBERRY FRUIT WORM (Zophodia grossulariae Riley)

Mississippi

R. W. Harned (June 25): During the latter part of May larvae reported as causing injury to blueberry plants were sent to this office from Ocean Springs and Laurel. These larvae were tentatively identified by Mr. J. M. Langston as the gooseberry fruit worm. On June 22 additional larvae were received from Corinth where they were reported as injuring blueberry plants.

PECAN

WALNUT CATERPILLAR (Datana integerrima G. & R.)

Mississippi

R. W. Harned (June 25): On June 12 Inspector T. F. McGehee sent to this office some pecan leaves from Victoria, that apparently contained the eggs of the walnut caterpillar, Inspector G. I. Worthington sent to us on June 18 from Merigold some specimens of the walnut caterpillar with the information that they were the first ones he had seen this year.

Texas

H. S. Adair (June 21): The walnut caterpillar is more abundant in this section (Brownwood) at this time than it has been in the past three years. Many trees are already

defoliated and the larvae of the first generation are still feeding. This pest is not often present in this section in sufficient numbers to attract attention. Where much damage occurs it is usually due to second or third generation larvae and the present infestation is considered somewhat unusual for this section.

PECAN BUD MOTH (Proteopteryx bolliana Sling.)

Mississippi

R. W. Harned (June 25): During the month of June many complaints have been received at this office regarding injury to pecan trees by the pecan bud-moth Proteopteryx bolliana. In almost every case these complaints were accompanied by specimens of this species. They have been received from the following counties: Tippah, Sunflower, Lee, Clay, Jackson, Hinds, Bolivar, and Washington. Inspector G. I. Worthington of Cleveland in Bolivar County wrote on June 20 as follows: "The most noticeable injury is to young grafted trees set last winter and the winter before. The worms are, however, attacking seedlings as I noticed infestations on nearly every pecan bush examined. Large trees show injury, but seem to suffer no noticeable set back."

GALLS (Phylloxera spp.)

Mississippi

R. W. Harned (June 25): Galls caused by Phylloxera seem to be abundant on pecan trees at various places in the State. Among the species recently received and identified by Mr. A. L. Hamner are Phylloxera caryaecaulis from Grace, Belzoni, and Cleveland, Phylloxera devastatrix from Satartia, Phylloxera notabilis from Collins, and a species that is probably new from Holly Springs, Raymond, Yazoo City, Shelby, and Natchez."

CITRUS

MEXICAN FRUIT WORM (Anastrepha ludens Loew)

Mexico

Monthly Letter of the Bureau of Entomology, No. 169, May 1928; F. H. Benjamin collected specimens of Anastrepha ludens in a sour orange which he picked from a tree in Matamoros, Tamaulipas, opposite Brownsville, Tex., on May 3, 1928. A thorough search during the growth of the crop of 1927-1928 failed to reveal any infestation in the fruit growing on the Texas side of the lower Rio Grande Valley.

A TENEBRIONID (Hymenorus obscurus Say)

Florida

E. R. Watson (June 18): During the last month there has been several outbreaks of a small elaterid beetle Hymenorus obscurus. This beetle has a habit of collecting in colonies

often composed of several thousand individuals and it generally feeds on the lichens on the trunks of trees, particularly on citrus and magnolia trees, but sometimes it does not content itself with this rather beneficial behavior but attacks the blossoms and young fruit and leaves of citrus. There has been an unusual number of complaints this year and in some sections the beetle seems to be unusually abundant and is found not only on the plants enumerated above but on oleander as well.

CITROPHILUS MEALYBUG (Pseudococcus gahani Green)

California

Monthly News Letter, Los Angeles Co. Hort. Comm., Vol. 10, No. 6, June 15; Mr. H. M. Armitage, Deputy Horticultural Commissioner in charge of Los Angeles County Insectaries, this past month received a shipment of one of the new mealybug parasites from Australia. Propagation in the County Insectary of the *Tetrachemus* species has been carried on from this shipment and the progeny have been released in citrophilus mealybug infested groves in an attempt to secure their establishment in as many areas as possible. By June 16 the first generation of parasites had been produced and liberated and many more are to follow.

BLACK SCALE (Saissetia oleae Bern.)

California

Monthly News Letter Los Angeles Co. Hort. Comm. Vol. 10 No. 6, June 15, 1928: This season's hatch of black scale according to Mr. H. H. Wilcomb, Deputy Horticultural Commissioner in Los Angeles County in charge of fumigating and spraying, has been decidedly retarded during the last weeks of May and the first part of June. Although the black scale started to hatch much earlier than last season, especially in the San Fernando, Claremont-Pomona, and Rivera -Whittier sections, the hatch seemed to be practically at a standstill, in the latter part of May during the cool weather at that time. However, it is felt that as soon as the weather conditions change to more continuous warm days, the remaining young scale will hatch very rapidly in a short time.

The parasitism of black scale for this past season was at very much lower ebb than last year although the two major parasites, Scutellista cyanea and Aphycus lounsburyi could be found in all parts of the county. Their abundance and effectiveness was generally much less than for several years past.

TRUCK - CROP INSECTS

WESTERN GARDEN FLEA BEETLE (Phyllotreta pusilla Horn)

Nebraska

M. H. Swenk (May 15-June 15): During June reports of continued injury to garden truck by this flea beetle were received from Holt and Harlan Counties.

CARROT BEETLE (Ligyrus gibbosus DeG.)

Kansas

J.W. McColloch (May 26): Adults of this species have injured tomato and sweet-potato plants at Moscow.

BLISTER BEETLES (Meloidae)

Kansas

J. W. McColloch (June 4): Injury to potatoes is reported from Logan.

STRIPED BLISTER BEETLE (Epicauta vittata Fab.)

Texas

F. L. Thomas (June 7): This beetle destroyed all of the tops on a half acre of sugar beets near Beaumont. Also attacked tomato.

POTATO AND TOMATO

COLORADO POTATO BEETLE(Leptinotarsa decemlineata Say)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agr., June 25: The Colorado potato beetle has been reported in abundance from Genesee County and as appearing in Onondaga, Elba, and Ontario Counties.

Virginia

W. S. Abbott (June : The Colorado potato beetle has been more abundant at Vienna this season than for the past six or eight years.

Florida

H. W. Berger (June 22): In April a small but rather severe infestation was reported from just outside of Jacksonville. Another infestation on a farm at Dinsmore (about 10 miles northwest of Jacksonville) was sprayed. (Reported by Wm. Gomme.)

Alabama

L. W. Brannon (June 1): The Colorado potato beetle is doing considerable damage to potatoes, eggplants, and tomatoes in the district of Birmingham. Some truckers in this locality have been forced to spray tomatoes to control this insect.

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Connecticut

W. E. Britton (June 25): The potato flea beetle is very abundant in the following counties: Shelton, Bridgeport, Danbury, Litchfield, Hartford, Holland, and New London.

- New York Weekly News Letter, N. Y. St. Coll. Agri., June 25: Elba County (H. T. Cook): Potato flea beetles are very active.
- Indiana H. F. Dietz (May 31): Potato flea beetles have been reported from Marion County as seriously destructive to potatoes and tomatoes.
- Nebraska M. H. Swenk (May 15-June 15): During June reports of continued injury to garden truck by this flea beetle were received from Holt and Harlan Counties.
- Utah G. F. Knowlton (June 6): The black flea beetles have been abundant throughout the principal sugar-beet sections of Utah during the spring. In many cases when the beets were very small their development was hindered by the beetles. Beets had to be replanted in a few fields because of this pest. As soon as beets attain fair size the damage is negligible.

BANDED FLEA BEETLE (Systema taeniata Say)

- Indiana J. J. Davis (June 26): A striped flea beetle, probably Systema taeniata, destroyed 13 acres of recently transplanted tomatoes at Worthington, according to a report received on June 16.

POTATO STALK BORER (Trichobaris trinotata Say)

- Indiana J. J. Davis (June 26): A stem borer answering the description of the potato stalk borer was damaging potatoes at Deputy on June 22.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

- Ohio T. H. Parks (June 24): Leafhoppers are now hatching in goodly numbers on potato leaves at Columbus. Indications are that some plantings will have a heavy infestation within another three weeks. This continues to be the most serious potato insect in Ohio.

- Indiana J. J. Davis (June 26): The potato leafhopper damaged potato at Nappanee June 6.

CABBAGE AND CAULIFLOWER

IMPORTED CABBAGE WORM (Pieris rapae L.)

- South Carolina W. J. Reid, Jr. (May 15): Only a comparatively small number of the larvae of the common cabbage worm have been noticed in the field this season.
- Georgia O. I. Snapp (June 16): There is a heavy infestation of the imported cabbage worm at Fort Valley, causing damage to early cabbage.

CABBAGE MAGGOT (Hylemyia brassicae Bouche)

- New York C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agri., June 11: The cabbage maggot is appearing in abundance in Onondaga, Chautauqua, Erie, and Monroe counties.
- Pennsylvania C. A. Thomas (June 12): Larvae have done much damage to cabbage in southeastern Pennsylvania this spring. Pupation is now beginning.
- Connecticut W. E. Britton (June 25): The cabbage maggot has been reported as attacking cabbage in about the average abundance from the following places: Hamden, East Haven, Bridgeport, Norwich, Southington, Thompsonville, and Litchfield.
- Ohio T. H. Parks (June): More damage than usual has been reported from the cabbage maggot.
- Iowa C. J. Drake (June 4): Serious injury by the cabbage maggot has occurred at Mason City, Clear Lake, Cedar Rapids, and Muscatine. This insect is a comparatively new pest in Iowa and seems to be increasing in numbers very rapidly.
- Indiana J. J. Davis (June 26): This insect was reported damaging radish at Logansport May 29 and Morocco, May 26. It was seriously damaging cabbage at South Bend May 31.
- Wisconsin E. L. Chambers (June 15): We have received more complaints concerning the injury of cabbage and cauliflower by the cabbage maggot this year than we have for a number of years. It seems to be very generally distributed.

DIAMOND-BACK MOTH (Plutella maculipennis Curt.)

- South Carolina W. J. Reid, Jr. (May 15): Worms were found to be attacking and seriously injuring one-third of the plants in a 22-acre field of spring cabbage on the J. M. Harrison farm in the immediate vicinity of Charleston. An average of three worms was found on each plant. The young heads of the plants are being riddled by the worms, the plants suffering most being the younger ones which were set in the field to replace those killed by the winter freezes. Larvae of all sizes can be found on the plants. The moths are very numerous at this time. Reports of similar infestation of cabbage on other farms in the vicinity have come to the writer during the past few days.
- Mississippi R. W. Harned (June 25): On June 9 Inspectors Gladney and Kislanko sent to us some tiny pupae that were collected on turnip plants at Biloxi. The pupae proved to be those of the diamond-back moth.

ZEBRA CATERPILLAR (Mamestra picta Harr.)

Indiana

J. J. Davis (June 26): The zebra caterpillar was reported conspicuous on corn at Marion, June 16. Specimens were also sent in on the same date from McCoysburg. In the latter shipment there was no statement of the crop damaged but pea foliage accompanied the larvae. This same larva damaged sweet corn at Rockville June 23 and field corn at Franklin on June 25.

Nebraska

M. H. Swenk (May 15-June 15): The zebra caterpillar was found injuriously attacking cauliflower at Lincoln on June 4.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Iowa

C. J. Drake (June 4): Eggs of the harlequin bug were found on cabbage plants shipped from Texas to Grinnell, Iowa. There were quite a number of eggs and most of them seemed to be fertile.

Alabama

L. W. Brannon (June 8): Harlequin-bug damage to turnips and cabbage in the district of Birmingham is very slight in comparison to what it was this time last season. Adults are very scarce.

CABBAGE CURCULIO (Ceutorhynchus rapae Gyll.)

Ohio

T. H. Parks (May 28): These beetles were present on cabbage in Lawrence County and had fed on the leaves while a few larvae were found in the stems. This is the first year that we have received reports of damage in Ohio.

Indiana

J. J. Davis (June 26): The cabbage curculio damaged cabbage at Battle Ground May 28.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

Massachusetts

A. I. Bourne (June 25): The asparagus beetle was found in fields May 27 and 28. They are about normal in abundance this season.

Connecticut

W. E. Britton (June 25): The asparagus beetles are attacking asparagus in about the usual abundance in the following places: Farmington, Shelton, Bristol, and Enfield.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N.Y. St. Coll. Agri., June 4 and 25: The asparagus beetle has been reported as abundant in Chautauqua, Onondaga, and Dutchess Counties.

Iowa

C. J. Drake (June 4): Large numbers of the asparagus beetle have been found at Ames, Muscatine, and Des Moines. The beetle is migrating westward very rapidly and is doing a considerable amount of damage to young asparagus beds in the eastern part of the State.

SPOTTED ASPARAGUS BEETLE (Crioceris duodecimpunctata L.)

Massachusetts

A. I. Bourne (June 25): The spotted asparagus beetle was found in the fields on June 1 and 2. There is about the normal abundance this season.

New York

C. R. Crosby and assistants, abstract from Weekly News Letter, N. Y. St. Coll. Agri., June 25: The spotted asparagus beetle has been reported as quite plentiful in Chautauqua County.

BEANS

BEAN APHID (Aphis rumicis L.)

Nebraska

M. H. Svenk (May 15-June 15): Aphids that have been complained of during the period covered by this report include the bean aphid.

GREEN CLOVER WORM (Plathypena scabra Fab.)

North Carolina

W. A. Thomas (June 14): A light infestation of this insect is developing on snap beans in the vicinity of Chadbourn, but no appreciable damage is being done at this time. However, the early appearance of the larvae may presage serious injury to the coming soy-bean crop, the bulk of which is just being planted.

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

Maryland

W. T. Henery (June 25): First record for this locality (College Park). About 20 larvae were found on two plants. There were both first and second instar larvae present, but all were evidently from the same egg group. They were found on the place of W. A. White, attacking bush beans.

North Carolina

W. A. Thomas (June 14): The Mexican bean beetle has just made its appearance in Columbus County and is doing considerable damage in some fields in the vicinity of Chadbourn. Few adults are in evidence, while both larvae and pupae are very abundant in some fields.

R. W. Leiby (June 23): This pest is now very seriously damaging foliage of snap beans. It is just as it was last year but covers a much greater area.

Mississippi

R. W. Harned (June 25): The first Mexican bean beetles to be received during 1928 were received on June 20 from Booneville, where they were reported as causing serious injury to garden beans. Those received were in the pupa stage.

Alabama

L. W. Brannon (June 8): Truckers in the district of Birmingham were picking beans from the first crop on May 29. Bean-beetle damage to the first crop was so slight that it was hardly noticeable. Very little damage could be seen except in spots in the field where fourth-instar larvae were feeding. Overwintered beetles are still seen in the field and pupae are fairly numerous. First-generation beetles will emerge in about a week. Only 4.6 per cent have emerged in the hibernation cage. The peak of emergence was between May 17 and 21. The winter survival was the lowest of any season.

BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

North and
South Carolina

W. A. Thomas (June 4-5): The bean leaf beetle has been unusually abundant in the two Carolinas this season and in some places has almost completely defoliated the plants. The present outbreak began early in May and increased in severity up to about the first of June, when the beetles apparently began transferring to young cowpeas and early soy beans. More than a dozen beetles have frequently been jarred from a single bunch of beans. Serious injury was observed at Columbia, Sumter, Dalzell, Florence, Marion, and Mullins, S. C., and Chadbourn, Whiteville, Lake Maccamaw, Lumberton, Hamlet, and Marston, N.C.

CUCUMBERS AND MELONS

STRIPED CUCUMBER BEETLE (Diabrotica vittata Fab.)

Massachusetts

A. I. Bourne (June 25): The striped cucumber beetle first began to appear in numbers on young squash and cucumbers June 17 and 18. They are now working in large numbers and are causing considerable injury to unprotected vines. From the evidence to date, I should judge they are about normally abundant.

Connecticut

R. B. Friend (June 25): The striped cucumber beetle is much more abundant and destructive than last year on cucurbits at Hamden.

Indiana

J. J. Davis (June 26): The striped cucumber beetle was very bad on cucumber at Forest June 15. May 31 it was reported entering greenhouses at Indianapolis and damaging cucumbers.

Wisconsin

J. E. Dudley, jr. (June 23): Practically no beetles had been found in the field in Kenosha County up to the 21st of June, when they suddenly appeared in rather large numbers, from 6 to 8 being found on each hill of cucurbits. Beetles are late in putting in their appearance this year.

Nebraska

M. H. Swenk (May 15-June 15): Complaints of the striped cucumber beetle attacking cucumber, melon, and pumpkin plants began to be received on May 24 and 25 and have continued coming in at about the normal numbers throughout the period covered by this report.

Mississippi

R. W. Harned (June 25): Specimens of the striped cucumber beetle were received on June 6 from Meridian, where they were reported as injuring cantaloupe plants.

MELON APHID (Aphis gossypii Glov.)

Nebraska

M. H. Swenk (May 15- June 15): Aphids that have been complained of during the period covered by this report include the melon aphid.

SQUASH BUG (Anasa tristis DeG.)

Mississippi

R. W. Harned (June 25): Injury to cantaloupe plants by the squash bug was reported from Meridian on June 6.

SQUASH

SQUASH BORER (Melittia satyriniformis Hbn.)

Mississippi

K. L. Cockerham (June 9): This insect is now doing heavy damage to the early squash crop. Full-grown larvae are found in the stalks and adults are frequently seen flying about the patches.

SQUASH BEETLE (Epilachna borealis Fab.)

North Carolina

J. N. Tenhet (June 15): The squash ladybird is appearing earlier than usual on cucurbits in the vicinity of Chadbourn this spring and in considerably greater numbers.

PICKLE WORM (Diaphania nitidalis Stoll)

Georgia

O. I. Snapp (June 16): Infestations by the pickle worm are very heavy on squash at Fort Valley, considerable damage being done.

Mississippi

K. L. Cockerham (June 9): These insects are now doing rather serious damage to squash and cucumber, being especially serious on squash.

ONIONS

ONION MAGGOT (Hylemyia antiqua Meig.)

New York

C. R. Crosby and assistants, abstract from Weekly News Letter

N. Y. St. Coll. Agri., June 25: Injury by the onion maggot is evident in Elba and Wayne Counties.

Ohio

E. W. Mendenhall (June 20): The onion maggot is quite bad this year in the onion plantations in Hardin County.

Indiana

J. J. Davis (June 26): The onion maggot has been apparently more abundant and destructive than usual. Reports of damage have been received as follows: Morocco, May 26 (pupae received); Rensselaer, June 3; Plymouth, June 6; Elkhart, June 6; Warsaw, June 8; and Angola, June 11.

Wisconsin

J. E. Dudley, jr. (June 16): Infestations on onions have been unusually late in developing and the maggots are found much deeper in the soil than usual, the majority being at from 4 to 6 inches underground. In one count of 3 feet of culls there were 760 puparia and 80 larvae procured.

E. L. Chambers (June 15): Many complaints have been received from various sections of the State to the effect that this pest is doing more injury than usual to the onion crops. Reports have been received from Racine, Kenosha, Milwaukee, and Rock Counties.

Iowa

C. J. Drake (June 4): The onion maggot has been reported from Pleasantville Valley and Clear Lake but does not seem to occur in destructive numbers.

TURNIP

TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

Nebraska

M. H. Swenk (May 15-June 15): Aphids of this species attacking turnip have been complained of during the period covered by this report.

STRIPED FLEA BEETLE (Phyllotreta vittata Fab.)

Alabama

L. W. Brannon (June 8): This insect is continuing to do considerable damage to turnips and young collards in the vicinity of Birmingham. In some cases the damage to turnips is so severe as to make them unmarketable. I observed a patch of young collards just sprouting that were damaged so severely that replanting was necessary.

BEET

SUGAR BEET ROOT MAGGOT (Tetanops aldrichi Hendel)

Utah

G. F. Knowlton (June 6): Tetanops aldrichi Hendel is doing

considerable damage in some fields at Hooper. The affected beets wilt badly during the heat of the day and the more seriously affected ones die. Many of the beets are dead, leaving noticeable skips in the rows. At Hooper many of the maggots are half to full grown. At Cornish the flies are abundant and mating.

SPINACH LEAF MINER (Pegomya hyoscyami Panz.)

New York

Weekly News Letter, N. Y. St. Coll. Agri., June 11: Erie County (M. N. Taylor): The spinach leaf miner has started to work on spinach, and growers carrying out the screening experiments have applied the cheesecloth.

Utah

G. F. Knowlton (June 6): The beet leaf miner is encountered in fields throughout the beet-growing areas of Utah but in such small numbers as to be causing practically no damage.

SWEET POTATO

SWEET-POTATO FLEA BEETLE (Chaetocnema confinis Cr.)

Mississippi

R. W. Harned (June 25): Flea beetles that were injuring sweet-potato plants at Nicholson on June 1, were received at this office and identified by Mr. J. M. Langston as Chaetocnema confinis.

S O U T H E R N F I E L D - C R O P I N S E C T S

TOBACCO

TOBACCO BUDWORM (Heliothis virescens Fab.)

North Carolina

R. W. Leiby (June 23): The tobacco budworm seems to be unusually destructive this season. More tobacco has been poisoned than ever before.

POTATO TUBER WORM (Phthorimaea operculella Zell.)

Florida

F. S. Chamberlin (June 6): Very few tobacco splitworms have been observed on tobacco in Gadsden County this season.

HORN WORMS (Phlegethontius spp.)

North Carolina

R. W. Leiby (June 23): Horn worms are unusually destructive this season in the tobacco section of the Coastal Plain.

RICE

A PYRALID MOTH (Chilo simplex Butler)

Hawaiian
Islands

R. H. Van Zwaluwenburg (May 21): On March 1, 1928, the attention of Mr. D. T. Fullaway was called to the infestation of rice plants near Honolulu by larvae of a pyralid borer, since determined as Chilo simplex Butler. Between 1,500 and 2,000 acres of rice are now known to be infested, all confined to the Island of Oahu. The insect was first noted by Chinese growers in October, 1927, but they failed to bring it to the attention of any of the entomologists. Adults, larvae, and pupae were found during March, 1928, the oldest rice in any one district being the most heavily infested. By April, adults were common among the plants in the field. The eggs are laid in small overlapping clusters either on the leaf blade or hidden between the leaf sheath and the main stalk. An idea of the severity of infestation of rice in some fields by April can be gotten from the record of between 40 and 50 adult moths reared from two stools brought in from a heavily infested paddy. Half-grown larvae in the insectary attack sugarcane and corn readily, eventually causing the death of the young plants. Examinations of cane and grass lands immediately adjacent to heavily infested rice paddies have, to date, failed to show infestation by this species in sugarcane or wild grasses.

F O R E S T A N D S H A D E - T R E E I N S E C T S

PERIODICAL CICADA (Tibicina septendecim L.)

Connecticut

W. E. Britton (June 25): The periodical cicada has emerged slowly owing to cool, moist weather. All reports are not in yet. The insects are chiefly on rocky ridges in the south-central portion of the State, being reported from New Haven, Hamden, Woodbridge, Cheshire, Wallingford, North Branford, Beaufort, New Britain, Guilford, Meriden, and Southington.

New York

W. J. Meagher (June 25): I am overrun with the 17-year locust at my place in the country in Orange County.

J. N. Knull (June 21): Adults present at Greenwood Lake June 21.

Stern & Meinstein (June 16): We have a large tract of ground in Valley Cottage and it is swarmed with locusts.

O. F. Rocklein (June 13): This insect is appearing in great numbers at Great Kills, Staten Island.

C. R. Crosby and assistants, abstract from Weekly News Letter N. Y. St. Coll. Agri., June 4, 11, and 25: This insect has been reported from the following counties: Dutchess, Orange, Greene, Ulster, and Columbia.

E. Kostal & W. H. Freeman (June 3): A single emerged specimen was found in the vicinity of Totterville, Richmond County, on May 30, several more on June 2, and a larger number on June 7.

H. E. Gamgee (June 19): We are having quite an epidemic of the 17-year locusts on Staten Island.

Lucy Upton (June 11): The 17-year locust is found in enormous numbers at the Baltusrol Golf Club, Springfield.

New Jersey

W. H. Ballou (May 30): Indications of the 17-year locust are noticed at Alpine Road.

Mrs. C. J. Sourbier (June 3): The 17-year locusts are emerging at Westfield.

D. W. Webb (June 10): I have noted the insect in the following places: Bargaintown, Glassboro, Maplewood, Plainfield, Scotch Plains, Carteret, and New Brunswick.

C. A. Thomas (June 12): I drove across New Jersey to the ocean and returned via Lakehurst and Browns Mill June 10 and did not see any specimens of this insect, although they were reported a week ago from near Vineland, and earlier from Connecticut.

Pennsylvania

J. N. Knull (June 21): Adults are present at Windgap. Eggs were first observed June 14 at Dauphin, Clarks Valley.

H. M. Cyr (June 20): This year there are numerous swarms of locusts on the outskirts of Palmerton and elsewhere in Carbon County. At the present date there are a few stragglers still issuing from the ground, although for the past week mating has been numerous and scars from egg-laying have already appeared on the trees.

C. A. Thomas (June 12): I have not seen a single specimen at Bustleton, although it is about two weeks overdue. I have not seen any in Chester County.

Virginia

W. S. Abbott (June 12): The pupal case of a cicada was found in a grove at Fairfax on May 27.

Mississippi

R. W. Harned (June 25): A very interesting collection was made at Yagoo City, on May 29, by Inspector Chesley Hines, when inside one of his boll weevil cages there emerged a fe-

male of the 13-year periodical cicada. This belonged to Brood XXVII of the periodical cicada. The only times that this brood has previously been recorded from any point in the United States, were in 1902, when it was reported as appearing on May 20 at Suffolk, Franklin County, Miss., and thirteen years later, in 1915, when this brood was seen again at this place.

BAGWORM (Thyridopteryx ophomeraeformis Haw.)

Indiana

J. J. Davis (June 26): The bagworm was reported from Terre Haute on June 15.

Kansas

J. W. McColloch (May 15-June 15): Bagworms are reported abundant on cedar trees at Westmoreland and Baxter Springs.

APHIDIIDAE

Nebraska

M. H. Swenk (May 15-June 15): The period here covered has been one marked by the abundance of aphids.

MITES (Eriophyes spp.)

Nebraska

M. H. Swenk (May 15-June 15): The period here covered has been one marked by an abundance of gall mites.

FALL WEBWORM (Hyphantria cunea Drury)

Mississippi

R. W. Harned (June 25): The fall webworm is beginning to show up in various parts of the State. The first specimens received at this office were from Moss Point, sent in on June 6. Recently specimens have been received from Holly Springs, Yazoo City, and Cleveland. In each case the specimens came from pecan trees. Inspector T. F. McGehee of Holly Springs reported on June 23 that the webworms were abundant in Benton, Marshall, and LaFayette Counties, especially on persimmon trees, although some pecan, walnut, and hickory trees were found infested.

CECROPIA MOTH (Samia cecropia L.)

Nebraska

M. H. Swenk (May 15-June 15): An unusual number of identification inquiries concerning the cecropia moth were received this spring between May 21 and June 12.

LEAF BEETLES (Galerucella spp.)

Wisconsin

E. L. Chambers (June 15): There appear to be two distinct species of Galerucella doing serious injury in spots over the State where they have appeared in extremely large numbers and defoliated many trees. They began appearing near Racine in the last week of April and have continued appearing in outbreak numbers up until the present date when they are being

reported serious in the extreme northern part of the State. Specimens have been taken on raspberry and current bushes where complete defoliation was reported. These beetles appeared in such large numbers at Green Bay and Sturgeon Bay that the County Board of Door County appealed for aid with an airplane such as was used by this department two years ago against the hemlock spanworm.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Indiana

J. J. Davis (June 25): The oyster-shell scale began hatching on lilac at LaFayette June 2, and was reported as killing ash at Aurora June 16.

ARBORVITAE

ARBORVITAE LEAF MINER (Argyresthia thuiella Pack.)

Connecticut

W. E. Britton (June 25): This insect has not been very destructive since 1921 but is now causing injury to arborvitae in the locality of Union City south of Waterbury. The trees are brown.

ASH

FLAT-HEADED APPLE TREE BORER (Chrysobothris femorata Oliv.)

Nebraska

M. H. Swenk (May 15-June 15): The borers most complained of during the period covered by this report included Chrysobothris femorata on ash trees.

BANDED ASH BORER (Neoclytus capraea Say)

Nebraska

M. H. Swenk (May 15-June 15): Neoclytus capraea has been reported as attacking ash trees during the period covered by this report.

ASH BORER (Podosesia fraxini Lugger)

North Dakota

C. N. Ainslie (June 22): The young ash trees set for shade in town yards and streets in Beach, Mott, and Dickinson are being attacked, and in some cases killed, by this pest. As many as twenty emergences of moths from one small tree have been noticed. No trace of attack can be found in trees growing wild in ravines. This injury has been apparently increasing in recent years.

BOXELDER

BOXELDER BUG (Leptocoris trivittatus Say)

Nebraska

M. H. Swenk (May 15-June 15): There was a revival of complaints from housekeepers concerning the boxelder bug about the middle of June.

CATALPA

CATALPA SPHINX (Ceratomia catalpae Boisd.)

New Jersey

D. W. Webb (June 18): We have had a report of complete defoliation of catalpa trees at Burlington.

CHESTNUT

GIANT APHID (Longistigma caryae Harr.)

Indiana

J. J. Davis (June 26): The large aphid Longistigma longistigma was reported abundant on chestnut at Brownstown June 8.

ELM

ELM COCKSCOMB GALL (Colopha ulmicola Fitch)

Indiana

J. J. Davis (June 26): The elm cockscomb gall was reported common at Frankfort June 13.

Nebraska

M. H. Swenk (May 15-June 15): Cockscomb gall aphids have been complained of recently.

WOOLLY ELM APHID (Eriosoma americanum Riley)

Nebraska

M. H. Swenk (May 15-June 15): The woolly elm aphid has been complained of this month.

ELM BORER (Saperda tridentata Oliv.)

Nebraska

M. H. Swenk (May 15-June 15): The elm borer has been complained of during the period covered by this report.

ELM SAWFLY (Cimbex americana Leach)

Massachusetts

A. I. Bourne (June 22): The elm sawfly first appeared on the elms May 20-22. They are particularly numerous on camper-down elms on the campus at Amherst.

EUROPEAN ELM SCALE (Gossyparia spuria Modeer)

- New York Weekly News Letter N. Y. St. Coll. Agri., June 4: Orange County (P. J. Parrott): The European elm scale is damaging elm at Monroe.
- Indiana J. J. Davis (June 26): The European elm scale was reported as abundant on elm at Marion June 23.
- Wisconsin E. L. Chambers (June 15): Solid blocks of elm trees in Madison and Milwaukee streets are heavily infested with this scale, and many show serious injury, some being killed where no control measures have been applied. This insect is more abundant this month than last, and more abundant than last year.

MAPLE

COTTONY MAPLE SCALE (Fulvina vitis Rathv.)

- Ohio E. W. Mendenhall (June 26): The soft maple shade trees in Springfield are infested somewhat with the cottony scale. These are bad in certain localities at Springfield.
- Indiana H. F. Dietz (May 31): The cottony maple scale has been reported as unusually abundant in the southern part of Indianapolis and also from Noblesville. The formation of the egg masses is just beginning to take place.
- J. J. Davis (June 26): The cottony maple scale was reported showing up at Treherne June 14, at Marion, Elwood, and Sedalia June 18, and at Gary June 22. So far no hatching has been observed.

OAK

CORK OAK MIDGE (Plagiotrochus suberi Weld.)

- California Monthly News Letter Los Angeles Co. Hort. Comm. Vol. 10, No. 6, June 15, 1928: Early in 1927 a severe injury to several fine cork oaks on a private estate in Los Angeles was found to be caused by a small midge which lays its eggs in the new twig growth, causing a swelling and dying of the twigs. Specimens were taken by Mr. Harold J. Ryan, Los Angeles County Horticultural Commissioner, and sent to Dr. Alfred C. Kinsey of Indiana University, a specialist on this type of insect. Dr. Kinsey determined the specimens as the cork oak midge, Plagiotrochus suberi Weld. He stated that the insect was undoubtedly imported from Europe, and had been taken from San Jose, Santa Clara, San Francisco, and Pasadena - in every case on the European cork oak. Since that time inspections made by Mr. L. E.

Myers, Horticultural Inspector for the county office, has disclosed other infestations at rather widespread localities. Apparently the insect has occurred for a number of years in California but has spread rather slowly, as it seems to attack only the cork oak, which has been planted in a number of different localities but does not occur generally. The native oaks do not seem to be attacked by this insect, and it is Dr. Kinsey's opinion that there is no reason to suppose it will attack them. There are, however, a number of native insects that do cause damage similar to this upon the native oaks, and which may be controlled when the trees are not too large or too numerous.

PINE

EUROPEAN PINE SHOOT MOTH (Rhyacionia buoliana Schiff.)

Connecticut

W. E. Britton (June 25): This pest is spreading eastward over the State attacking Scotch pine. (Hartford given as locality.)

NANTUCKET PINE MOTH (Rhyacionia frustrana Comst.)

Mississippi

R. W. Harned (June 25): On April 24 Inspector J. P. Kislanko sent to this office some larvae that were found injuring the tips of pine twigs at Ocean Springs. One adult moth was reared which has been identified by Mr. August Busck of the U. S. National Museum as Rhyacionia frustrana. On June 19 Inspector R. P. Colmer sent to us some pine twigs from Moss Point that showed similar injury although no insects could be found in the twigs.

PINE LEAF SCALE (Chionaspis pinifoliae Fitch)

Massachusetts

A. I. Bourne (June 25): The first young of the pine leaf scale were appearing on May 28 and 29.

Wisconsin

E. L. Chambers (June 15): Blister-rust scouts have turned in many specimens of this pest in some sections of Monroe and Sauk Counties, where it seems to be appearing more plentifully on pine during the past few years.

Nebraska

M. H. Swenk (May 15-June 15): Several complaints of injury to spruce trees by the pine leaf scale were received during the period covered by this report.

A SAWFLY (Neodiprion sp.)

Connecticut

M. P. Zappe (June 21): This insect is more abundant than for several years. Many places pitch pines are completely defoli-

ated but large trees still have some leaves left. It has been reported from Unionville, Plainville, and Branford.

SPRUCE

SPRUCE BUDWORM (Harmolopa fumiferana Clem.)

Indiana

J. J. Davis (June 26): The spruce budworm was reported as damaging blue spruce and, to some extent, Norwegian pine at Cambridge City May 31.

A CURCULIONID (Thylacites incanus L.)

Massachusetts

A. I. Bourne (June 25): There was brought to our attention in early June a report of beetles occurring in considerable numbers in a nursery in the eastern part of the State. Evidently the beetles were reported as causing considerable injury to blue spruce. Further examination brought out the fact that the beetles were working on practically all of the spruces as well as on most of the pines, except white pine. Specimens of these beetles were identified by H. S. Barber as Thylacites incanus L., apparently a new species to the country.

EASTERN SPRUCE BEETLE (Dendroctonus piceaperda Hopk.)

Maine

H. B. Peirson (June 1): A large outbreak started about 1922 in the north-central part of the State, but has just been located. The insects occur in the inaccessible large spruces.

Olethreutidae

Maine

H. B. Peirson (June 1): A species of Olethreutidae is attacking red spruce at Booth Bay and south along the coast.

SPRUCE SAWFLY (Neodiprion abietis Harr.)

New York

Weekly News Letter N. Y. St. Coll. Agri., June 25: Clinton County (A. B. Burrell): A sawfly larva that defoliated most of the pitch pines of this section last year is busily at work again this season. It was identified last year as a species not hitherto reported from New York State. Occasionally it attacks white pine standing near pitch pines.

SPRUCE GALL APHID (Adelges abietis L.)

New York

Weekly News Letter N. Y. St. Coll. Agri., June 11: Orange County (Sidney Jones): The spruce gall aphid is doing injury to spruce near Monroe.

SPRUCE MITE (Paratetranychus unimaculatus Jacoby)

New York

Weekly News Letter N. Y. St. Coll. Agri., June 4: Orange County (Sidney Jones): Several spruce trees in Middletown are quite badly infested with the mite and some of the trees are turning brown.

PINE LEAF MINER (Paralechia pinifoliella Chamb.)

Wisconsin

E. L. Chambers (June 15): The inner branches of blue and Norway spruce show unusually heavy infestations of this pest.

SPRUCE BUD SCALE (Physokermes piceae Schrank)

Wisconsin

E. L. Chambers (June 15): All junipers and spruce trees in certain solid blocks have been attacked with a light infestation which is gradually growing worse.

WILLOW

SATIN MOTH (Stilpnotia salicis L.)

Maine

H. B. Peirson (June 15): This insect has been reported as attacking poplars and willows at Bar Harbor and southward in more than normal abundance.

A WEEVIL (Orchestes rufipes Lec.)

Maine

H. B. Peirson (June 15): This insect has been reported as attacking laurel-leaf willow on Kennebunk beach and has also been found on Celastrus scandens. It is more abundant than last year.

INSECTS AFFECTING GREENHOUSE AND
ORNAMENTAL PLANTS AND LAWNS

NEGROBUG (Thyreocoris pulicarius Germ.)

Mississippi

R. W. Harned (June 25): Negrobugs belonging to the species Thyreocoris pulicarius were abundant on aster and snapdragon plants at Grenada on June 20.

CHRYSANTHEMUM

CHRYSANTHEMUM GALL MIDGE (Diarthronomyia hypogaea Loew)

Nebraska

M. H. Swenk (May 15-June 15): During the first week in June an Omaha florist reported a heavy infestation of the chrysanthemum midge in his greenhouse.

CHRYSANTHEMUM APHID (Macrosiphoniella sanborni Gyll.)

Nebraska

M. H. Swenk (May 15-June 15): The chrysanthemum aphid has been complained of during the period covered by this report.

THRIPS (Thysanoptera)

New York

Weekly News Letter N. Y. St.-Coll. Agri., June 4: Orange County (Sidney Jones): Thrips have been doing damage to chrysanthemums in a greenhouse in Middleton.

COLUMBINE

COLUMBINE LEAF MINER (Phytomyza aquilegiae Hardy)

Indiana

J. J. Davis (June 26): The aquilegia leaf miner was very destructive to commercial plantings of aquilegia at Whiting June 19.

DELPHINIUM

CYCLAMEN MITE (Tarsonemus pallidus Banks)

New York

G. H. Griswold (June 28): A mite, probably the cyclamen mite, has been sent to this office. Infestation appears to be serious judging from material sent in. These mites are attacking larkspur at Frankfort.

ELDERBERRY

SPINDLE WORM (Achatodes zeae Harr.)

Wisconsin

E. L. Chambers (June 15): Ornamental varieties of elder growing in parks and nurseries in various sections of the State have been badly infested with this borer this spring. More than a dozen complaints have been received during the past week.

A MITE (Eriophyes sp.)

Nebraska

M. H. Swenk (May 15-June 15): Witches broom on hackberry has been especially complained of.

IRIS

IRIS BORER (Macronoctua onusta Grote)

Indiana

H. F. Dietz (May 31): The eggs of the iris root borer began to hatch at Indianapolis on April 30, and hatching has continued until the 25th of May. Reports from Indianapolis indicate that this pest is as abundant this year as it was last.

J. J. Davis (June 26): The iris borer was reported as injurious to iris at Green Castle June 25.

Wisconsin

E. L. Chambers (June 15): A planting of iris in Sparta was found infested with the iris borer last week and several other infestations have been reported by our pest reporters.

IVY

IVY APHID (Aphis hederæ Kalt.)

Mississippi

R. W. Harned (May 29): This aphid was reported on ivy at Greenwood on May 8.

PHLOX

RED SPIDER (Tetranychus telarius L.)

Indiana

J. J. Davis (June 26): The red spider was reported damaging phlox at Hanover June 22.

PRIVET

A LEAF ROLLER (Cacoecia rosana L.)

Connecticut

W. E. Britton (June 25): This insect has been reported as attacking privet hedges at New Haven. It seems to be more abundant than usual.

ROSE

ROSE SAWFLY (Caliroa aethiops Fab.)

Indiana

H. F. Dietz (May 31): The rose sawfly has been commonly reported from Indianapolis since May 24.

B. A. Porter (June 20): Rose bushes near the Vincennes laboratory were partially defoliated by the first brood. Adults of this brood were observed in great numbers June 15.

J. J. Davis (June 26): The rose slug was reported as damaging roses at Connersville June 25.

Kansas

J. W. McColloch (June 26): The rose slug has been injurious at Manhattan, Hays, Haddam, and Topeka during the past month.

ROSE LEAF BEETLE (Nodonota puncticollis Say)

Maryland

J. A. Hyslop (June 12): This flea beetle is in every flower in my rose garden near Silver Spring attacking hybrid tea and hybrid perpetual roses, disfiguring the petals. There are from one to six beetles in every blossom.

ROSE CHAFER (Macrodactylus subspinosus Fab.)

Indiana

J. J. Davis (June 26): This rose bug was reported as damaging iris and the foliage and fruit of apple at Michigan City June 9 and roses at South Bend June 12. On June 18 these beetles were causing the death of young chickens at Medaryville. Green peaches were being damaged by these beetles at Goshen June 25.

FLOWER THRIPS (Frankliniella tritici Fitch)

Mississippi

R. W. Harned (June 25): Many complaints have been received during the past few months regarding the injury by thrips to roses. Specimens identified as Franklinella tritici have recently been received from Drew, Yazoo City, and Scoby.

GALL WASPS (Rhodites spp.)

Nebraska

M. H. Swenk (May 15-June 15): The present spring has been one favorable to gall wasps as well as to aphids and gall mites. From Kearney County west to Red Willow County reports of unusually common infestations of roses by the galls of Rhodites nebulosus were received, while in eastern Nebraska similar reports were received of an unusual abundance of the spiny rose gall, Rhodites bicolor.

SPIRAEA

SPIRAEA APHID (Aphis spiraeicola Patch)

Indiana

J. J. Davis (June 26): Spiraea aphids were very abundant at Cory June 12.

H. F. Dietz (May 31): The spiraea aphid is very abundant on Spiraea vanhouttei.

VIBURNUM

SNOWBALL APHID (Aphis viburnicola Gill.)

Nebraska

M. H. Swenk (May 15-June 15): The snowball aphid has been complained of during the period covered by this report.

ZINNIA

FULLER'S ROSE BEETLE (Pantomorus fulleri Horn)

North Carolina J. N. Tenhet (June 10): Fuller's rose beetle is damaging zinnias in gardens in the locality of Chadbourn. It was recorded here last spring as damaging soy beans. It would seem that there is a possibility of its developing into an economic pest.

A WHITE GRUB (Phyllophaga cribrosa Lec.)

Texas F. L. Thomas (June 11): A correspondent at Big Spring reported this insect destroying zinnia plants.

LAWNS

ANTS (Formicidae)

Indiana J. J. Davis (June 26): Ants in lawns and gardens have been very abundant throughout the State. During the past month we have received reports from Muncie, Gary, Frankfort, Elkhart, South Bend, Indianapolis, LaFayette, Salem, Richmond, Plymouth, Ft. Wayne, and Evansville. They were reported actually destroying strawberry and other plants in several cases.

Wisconsin E. L. Chambers (June 15): There have been more complaints from ants entering houses and working in lawns this year than we have received for several years.

Nebraska M. H. Swenk (May 15-June 15): All over eastern Nebraska, from the latter part of May to the middle of June, soil-infesting ants have been proving to be a great nuisance in the bluegrass lawns and flower gardens and have been the cause of many inquiries as to control.

BLACK HOUSE ANT (Monomorium minutum Mayr)

Ohio E. W. Mendenhall (June 8): I find the black ants, which are a great nuisance, prevalent in gardens and lawns.

Mississippi R. W. Harned (June 25): Dr. M. R. Smith reports that during the period from May 31 to June 6 winged males and wingless females of the tiny black ant, Monomorium minimum were observed mating on the ground or on weeds in the vicinity of the parental nests. These observations show that a nuptial flight for mating is not absolutely necessary in this species, and without doubt the males pair with their sisters. The workers of this species have been the source of complaint from housekeepers in Columbus, West Point, Starkville, and other towns.

CUTWORMS (Noctuidae)

Nebraska

M. H. Swenk (May 15-June 15): Toward the middle of June information was received that many of the lawns of Vernango, Perkins County, were being destroyed by whitish brown-headed cutworms, resembling very much the pale western cutworm that we have not been able to identify specifically.

INSECTS ATTACKING MAN AND
DOMESTIC ANIMALS

MAN

FLEAS (Siphonaptera)

Indiana

H. F. Dietz (May 31): The first report of fleas in dwellings was received on May 26.

Georgia

Department of Health, Atlanta (June 21): We are receiving numerous calls and complaints about fleas throughout the City of Atlanta. These insects do not seem to come from animals of any sort, as they appear in great numbers under and in the houses where no dogs, cats, or other animals are kept or have been kept for quite a period.

Florida

F. C. Bishopp (June 7): Report of an outbreak of fleas at Ocala.

CLOVER MITE (Bryobia praetiosa Koch)

Ohio

T. H. Parks (June 12): Specimens were sent to this office with the statement that these mites were making life miserable for occupants of a house in London, rooms having been infested for some time.

(Ichneumonidae)

Indiana

J. J. Davis (June 26): An ichneumon fly was sent in from Red Key May 26, where it was reported as stinging a baby and causing much suffering.

A GNAT (Hippelates flavipes Loew)

Texas

D. C. Parman (June 3): On June 3, lunch was had under shade trees along the creek just out of Round Rock and Hippelates were quite annoying; a dozen or more were about the face most of the time. At 4 p.m. Landa Park at New Braunfels was visited for about an hour. Hippelates were generally observed and many of the thousands of people were constantly brushing the face with the

hands to keep them from the eyes. There were usually from one to eight or ten about the face. (This species is probably flavipes.)

HOUSEHOLD AND STORED -

PRODUCTS INSECTS

TERMITES (Reticulitermes sp.)

- Ohio T. H. Parks (June 22): Termites seem to be getting more of a nuisance each year as we get more complaints of their work in buildings. I visited a place today where they had built passage ways up the cement wall of a basement to reach the woodwork.
- Indiana H. F. Dietz (May 31): Since the middle of March a number of reports on termites infesting buildings in Indianapolis have been received. In three cases where severe damage was done the species proved to be R. virginicus Banks. In three other cases which were examined the species was R. flavipes Koll.
- Nebraska M. H. Swenk (May 15-June 15): Additional reports of damage by our common termite R. tibialis Banks were received during the period covered by this report. One report received May 16 related to injury to the roots of corn shoots in the field in Nuckolls County, and another June 4 related to the destruction of ash trees in Lancaster County.
- Kansas J. W. McColloch (June 20): During the past month damage to dwellings has been reported from Fort Scott, Savonburg, Kansas City, Solomon, McSouth, Gypsum, Atchison, Vermillion, Pittsburg, and Bendena. A store building at Kinsley has been damaged. Injury to ornamentals was reported from Warmego.

ANTS (Formicidae)

- Mississippi R. W. Harned (June 25): Workers of Pheidole dentata were found infesting a house at West Point by Dr. M. R. Smith. He reports that the ants were observed crawling on the kitchen table where they sought out foods of a greasy nature. Although the ants commonly nest in the brick foundations of houses or sometimes in rotten sills, this is the first time the species has come to his attention as a house pest. Dr. Smith reports that the small sugar ant, Prenolepis sp., has been observed to infest a bakery and several houses in this city. These ants have also been reported from a number of other towns. They are especially fond of sugar, syrup, jellies, the icing of cakes, etc.

ARGENTINE ANT (Iridomyrmex humilis Mayr)

- Mississippi R. W. Harned (June 25): On June 9 Dr. Smith observed numerous winged males of the Argentine ant in a nest at Columbus. They were the first winged specimens of this species he had observed

this year. The Argentine ant has recently been found at Star for the first time.

FIRE ANT (Solenopsis geminata Fab.)

Mississippi

R. W. Harned (June 25): On June 9 Dr. Smith found many winged males and winged females of the fire ant in several nests in Columbus. He also noticed pupae of the sexed forms. These are the first sexed forms seen this year.

CARPENTER ANT (Camponotus herculeanus L.)

Indiana

H. F. Dietz (May 31): The carpenter ant has been reported several times as quite abundant in residences in Indianapolis.

CARPENTER BEE (Xylocopa virginica Drury)

Kansas

J. W. McColloch (June 15): Injury to farm buildings by this insect was reported from Madison May 25 and Fort Scott June 1.

POWDER POST BEETLES (Lyctus spp.)

Indiana

J. J. Davis (June 26): Powder post beetles were destructive at Edinburg June 16.

Kansas

J. W. McColloch (May 29): The powder post beetles ruined an oak flooring in a house at Red Wing.

California

R. E. Campbell (June 1): Two complaints have recently been received of powder post beetles damaging oak flooring in houses in the vicinity of Alhambra. The houses were 2 and 4 years old. Single boards, here and there, in several rooms, contained numerous exit holes and indications that the insects were still working. A few adults could be collected each day.

S A SPRINGTAIL (Isotoma quadrioculata Tullb.)

Nebraska

M. H. Swenk (May 15-June 15): A housekeeper in Otoe County reported such an abundance of springtails, Isotoma quadrioculata, in her new refrigerator that milk, cream, and cheese in it became badly infested. They proved difficult to eradicate.

FALSE SCORPIONS (Pseudoscorpiones)

Nebraska

M. H. Swenk (May 15-June 15): False scorpions were found in large numbers along the walls and ceiling of the rooms in a house in Colfax County during the latter part of May.

INDIAN-MEAL MOTH (Plodia interpunctella Hbn.)

Indiana

J.J.Davis (June 26): The indian-meal moth was reported as damaging shelled corn at Albion May 26.

BEAN WEEVIL (Mylabris obtectus Say)

Indiana

J. J. Davis (June 26): The bean weevil was reported as damaging bean seed at Marion June 22.

EUROPEAN GRAIN MOTH (Tinea granella L.)

Michigan

R. H. Pettit (June 14): We received today a large sending of the European grain moth from a corncrib in the vicinity of East Lansing. As this is not a very common in the State, I am sending you a record of its occurrence.

